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09/777,477	02/06/2001	Toshihiko Muramatsu	P/2054-131	8876

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EXAMINER

BEHULU, ALEMAYEHU

ART UNIT	PAPER NUMBER
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2682

DATE MAILED: 05/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/777,477

Applicant(s)

MURAMATSU, TOSHIHIKO

Examiner

Alemayehu Behulu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/16/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 3, 5- 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshida (U.S. Patent No. 5,608,324).

Regarding claim 1, Yoshida discloses a communication device, wherein data is transmitted and received via a communication section and a line, comprising: decision means for deciding whether or not to transmit and receive data based on predetermined information corresponding to the state of the line, and whether or to interrupt communications if the device is currently in a transmission/reception state (column 3, lines 45-column 4, lines 7, column 5, lines 36-52, column 7, lines 16-44), a controller for controlling communication section according decision results from decision means (figure 1, number 14), predetermined information containing prediction results based on a prediction of a data amount to be transmitted or received in current communication (column 1, lines 64-column 2 lines 33, claim 9).

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Regarding claim 2, Yoshida teaches the communication device defined in claim 1, further comprising: an information holder for holding said predetermined information; said decision means deciding whether or not to transmit and receive data based on current predetermined information and old predetermined information held in said holder, or whether or not to interrupt communications if the device is currently in a transmission/reception state (figure 1, number 32).

Regarding claim 3, Yoshida teaches the communication device defined in claim 1, further comprising notification for notifying a user of decision results according to the decision results of decision means (column 6, lines 42-61).

Regarding claim 5, Yoshida teaches the communication device defined in claim 1, wherein predetermined information contains information representing a reception level (column 1, lines 54-column 2, lines 19, column 3, lines 9-32).

Regarding claim 6, Yoshida teach the communication device defined in claim 1, wherein said predetermined information contains information representing an error rate (column 1, lines 40-45).

Regarding claim 7, Yoshida teaches the communication device defined in claim 1, wherein predetermined information contains information representing a response timing from a connected destination (column 7, lines 16-44).

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Regarding claim 8, Yoshida teaches the communication device defined in claim 1, wherein said predetermined information contains information representing an output voltage level of a Power source within the device (column 3, lines 9-34).

2. Claims 1, 3, 5- 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Bergins (U.S. Patent No. 5,826,198).

Regarding claim 1, Bergins teaches a communication device, wherein data is transmitted and received via a communication section and a line, comprising: decision means for deciding whether or not to transmit and receive data based on predetermined information corresponding to the state of the line, and whether or to interrupt communications if the device is currently in a transmission/reception state (figure 3 column 2, lines 47-65 and column 6, lines 42-62), a controller for controlling communication section according decision results from decision means (figure 1, numbers 34 and 42 and figure 3, number 305), predetermined information containing prediction results based on a prediction of a data amount to be transmitted or received in current communication (column 6, lines 63-column 7, lines 23, column 10, lines 60-62).

Regarding claim 3, Bergins teaches the communication device defined in claim 1, further comprising notification for notifying a user of decision results according to the decision results of decision means (column 5, lines 34-41, column 11, lines 62-column 12, lines 2).

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Regarding claim 5, Bergins teaches the communication device defined in claim 1, wherein predetermined information contains information representing a reception level (figure 2, number 305).

Regarding claim 6, Bergins teach the communication device defined in claim 1, wherein said predetermined information contains information representing an error rate (figure 8A, number 807).

Regarding claim 7, Bergins teaches the communication device defined in claim 1, wherein predetermined information contains information representing a response timing from a connected destination (figure 3, numbers 302 and 303, column 3, lines 9-17, column 9, lines 49-62, column 11, lines 31-56).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida (U.S. Patent No. 5,608,324) in view of Toyoshima (U.S. Patent No. 5,236,694).

Regarding claim 9, Yoshida teaches the communication device defined in claim 8. However, Yoshida fails to teach wherein said power source within the device comprises a secondary

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battery. But, Toyoshima teaches wherein said power source within the device comprises a secondary battery (see Toyoshima column 2, lines 66-column 3, lines 3). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to combine Yoshida (U.S. Patent No. 5,608,324) with Toyoshima (U.S. Patent No. 5,236,694) in order to not to lose valuable information.

Regarding claim 10, the combination of Yoshida and Toyoshima teach the communication device defined in claim 9, further comprising prediction means for predicting a transmittable/receivable data amount based on a charging amount or output voltage level of said secondary battery; said predetermined information containing prediction results acquired by said prediction means (see Toyoshima figures 1-3 column 2, lines 66-column 4 lines 35).

Regarding claim 11, the combination of Yoshida and Toyoshima teach the communication device defined in claim 10, further comprising second prediction means for predicting a data amount to be transmitted or received in current communications; said predetermined information containing prediction results acquired by said second prediction means (see Yoshida column 2, lines 20-34, claim 9).

4. Claims 4, 12, 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida (U.S. Patent No. 5,608,324) in view of Acosta (U.S. Patent No. 6,166,729).

Regarding claim 4, Yoshida teaches the communication device defined in claim 1. However, Yoshida fails to teach decision for disconnection of communications, controller controls

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communication to disconnect the line after the logging-out in accordance with predetermined communication procedure. But, Acosta teaches decision for disconnection of communications, controller controls communication to disconnect the line after the logging-out in accordance with predetermined communication procedure (column 30, lines 28-67). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to combine Yoshida (U.S. Patent No. 5,608,324) with Acosta (U.S. Patent No. 6,166,729) in order to ease network congestions.

Regarding claim 12, Yoshida teaches a communication method suitable for a communication device which transmits and receives data via a communication section line, method comprising steps of: deciding whether or not to transmit data based on predetermined information corresponding to the state of the line or the internal state of the system or whether or not to interrupt communications if the device is currently in a transmission/reception state (column 3, lines 45-column 4, lines 7, column 5, lines 36-52, column 7, lines 16-44), predetermined information containing prediction results based on a prediction of a data amount to be transmitted or received in current communication (column 1, lines 64-column 2 lines 33, claim 9). However, Yoshida fails to teach controlling communication section to disconnect the line after the logging-out in a predetermined communication procedure, in accordance with decision results in decision step. But, Acosta teaches controlling communication section to disconnect the line after the logging-out in a predetermined communication procedure, in accordance with decision results in decision step (column 30, lines 28-67). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to combine Yoshida (U.S.

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Patent No. 5,608,324) with Acosta (U.S. Patent No. 6,166,729) in order to ease network congestions.

Regarding claim 13, the combination of Yoshida and Acosta teach the communication method defined in claim 12, further comprising the steps of: holding said predetermined information; deciding whether or not to transmit and receive data based on current predetermined information and old predetermined information held in said holder, or whether or not to interrupt communications if the device is currently in a transmission/reception state (see Yoshida figure 1, number 32).

Regarding claim 14, the combination of Yoshida and Acosta teach the communication method defined in claim 12, further comprising notification for notifying a user of decision results according to the decision results of decision step of deciding (see Yoshida column 6, lines 42-61).

Regarding claim 15, the combination of Yoshida and Acosta teach the communication method defined in claim 12, wherein step of controlling further comprising the step of controlling communication to disconnect the line after the logging-out in accordance with a predetermined communication procedure when the decision result of step of deciding is disconnection of communications (see Acosta column 30, lines 28-67).

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Regarding claim 16, the combination of Yoshida and Acosta teach the communication method defined in claim 12, wherein predetermined information contains information representing a reception level (see Yoshida column 1, lines 54-column 2, lines 19, column 3, lines 9-32).

Regarding claim 17, the combination of Yoshida and Acosta teach the communication method defined in claim 12, wherein said predetermined information contains information representing an error rate (see Yoshida column 1, lines 40-45).

Regarding claim 18, the combination of Yoshida and Acosta teach the communication method defined in claim 12, wherein predetermined information contains information representing a response timing from a connected destination (see Yoshida column 7, lines 16-44).

Regarding claim 19, the combination of Yoshida and Acosta teach the communication method defined in claim 12, wherein said predetermined information contains information representing an output voltage level of a power source within the device (see Yoshida column 3, lines 9-34)

5. Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida (U.S. Patent No. 5,608,324) and Acosta (U.S. Patent No. 6,166,729) in view of Toyoshima (U.S. Patent No. 5,236,694).

Regarding claim 20, the combination of Yoshida and Acosta teach the communication device defined in claim 19. However, Yoshida and Acosta fail to teach wherein said power source

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within the device comprises a secondary battery. But, Toyoshima teaches wherein said power source within the device comprises a secondary battery (see Toyoshima column 2, lines 66-column 3, lines 3). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to combine Yoshida (U.S. Patent No. 5,608,324) with Toyoshima (U.S. Patent No. 5,236,694) in order to not to lose valuable information.

Regarding claim 21, the combination of Yoshida, Acosta and Toyoshima teach the communication device defined in claim 9, further comprising prediction means for predicting a transmittable/receivable data amount based on a charging amount or output voltage level of said secondary battery; said predetermined information containing prediction results acquired by said prediction means (see Toyoshima figures 1-3 column 2, lines 66-column 4 lines 35).

Regarding claim 22, the combination of Yoshida, Acosta and Toyoshima teach the communication device defined in claim 10, further comprising second prediction means for predicting a data amount to be transmitted or received in current communications; said predetermined information containing prediction results acquired by said second prediction means (see Yoshida column 2, lines 20-34, claim 9).

6. Claims 2, 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergins (U.S. Patent No. 5,826,198) in view of Toyoshima (U.S. Patent No. 5,236,694).

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Regarding claim 2, Bergins teaches the communication device defined in claim 1. However, Bergins fails to teach an information holder for holding said predetermined information; said decision means deciding whether or not to transmit and receive data based on current predetermined information and old predetermined information held in said holder, or whether or not to interrupt communications if the device is currently in a transmission/reception state. But, Toyoshima teaches an information holder for holding said predetermined information; said decision means deciding whether or not to transmit and receive data based on current predetermined information and old predetermined information held in said holder, or whether or not to interrupt communications if the device is currently in a transmission/reception state (see Toyoshima figure 1, number 9, figure 2 and column 3, lines 4-54). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to combine Bergins (U.S. Patent No. 5,826,198) with Toyoshima (U.S. Patent No. 5,236,694) in order to avoid network congestion.

Regarding claim 3, the combination of Bergins and Toyoshima teach the communication device defined in claim 1, further comprising notification for notifying a user of decision results according to the decision results of decision means (see Toyoshima figure 1, number 5, figure 3, label S5, column 4, lines 35-40).

Regarding claim 8, the combination of Bergins and Toyoshima teach the communication device defined in claim 1, wherein said predetermined information contains information representing an

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output voltage level of a power source within the device (see Toyoshima figure 2, column 3, lines 4-34).

Regarding claim 9, the combination of Bergins and Toyoshima teach the communication device defined in claim 8, wherein said power source within the device comprises a secondary battery (see Toyoshima column 2, lines 66-column 3, lines 3).

Regarding claim 10, the combination of Bergins and Toyoshima teach the communication device defined in claim 9, further comprising prediction means for predicting a transmittable/receivable data amount based on a charging amount or output voltage level of said secondary battery; said predetermined information containing prediction results acquired by said prediction means (see Toyoshima figures 1-3 column 2, lines 66-column 4 lines 35).

Regarding claim 11, the combination of Bergins and Toyoshima teach the communication device defined in claim 10, further comprising second prediction means for predicting a data amount to be transmitted or received in current communications; said predetermined information containing prediction results acquired by said second prediction means (see Bergins column 6, lines 63-column 7, lines 23, column 10, lines 60-62).

7. Claims 4, 12, 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergins (U.S. Patent No. 5,826,198) in view of Acosta (U.S. Patent No. 6,166,729).

Regarding claim 4, Bergins teaches the communication device defined in claim 1. However, Bergins fails to teach decision for disconnection of communications, controller controls communication to disconnect the line after the logging-out in accordance with predetermined communication procedure. But, Acosta teaches decision for disconnection of communications, controller controls communication to disconnect the line after the logging-out in accordance with predetermined communication procedure (column 30, lines 28-67). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to combine Bergins (U.S. Patent No. 5,826,198) with Acosta (U.S. Patent No. 6,166,729) in order to ease network congestions.

Regarding claim 12, Bergins teaches a communication method suitable for a communication device which transmits and receives data via a communication section line, method comprising steps of: deciding whether or not to transmit data based on predetermined information corresponding to the state of the line or the internal state of the system or whether or not to interrupt communications if the device is currently in a transmission/reception state (figure 3 column 2, lines 47-65 and column 6, lines 42-62), predetermined information containing prediction results based on a prediction of a data amount to be transmitted or received in current communication (column 6, lines 63-column 7, lines 23, column 10, lines 60-62). However, Bergins fails to teach controlling communication section to disconnect the line after the logging-out in a predetermined communication procedure, in accordance with decision results in decision step. But, Acosta teaches controlling communication section to disconnect the line after the

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logging-out in a predetermined communication procedure, in accordance with decision results in decision step (column 30, lines 28-67). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to combine Bergins (U.S. Patent No. 5,826,198) with Acosta (U.S. Patent No. 6,166,729) in order to ease network congestions.

Regarding claim 14, the combination of Bergins and Acosta teach the communication method defined in claim 12, further comprising notification for notifying a user of decision results according to the decision results of decision step of deciding (see Bergins column 5, lines 34-41, column 11, lines 62-column 12, lines 2).

Regarding claim 15, the combination of Bergins and Acosta teach the communication method defined in claim 12, wherein step of controlling further comprising the step of controlling communication to disconnect the line after the logging-out in accordance with a predetermined communication procedure when the decision result of step of deciding is disconnection of communications (see Acosta column 30, lines 28-67).

Regarding claim 16, the combination of Bergins and Acosta teach the communication method defined in claim 12, wherein predetermined information contains information representing a reception level (see Bergins figure 2, numbers 201, 204, column 5, lines 65-column 6, lines 33).

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Regarding claim 17, the combination of Bergins and Acosta teach the communication method defined in claim 12, wherein said predetermined information contains information representing an error rate (see Bergins figure 8A, number 807).

Regarding claim 18, the combination of Bergins and Acosta teach the communication method defined in claim 12, wherein predetermined information contains information representing a response timing from a connected destination (see Bergins figure 3, numbers 302 and 303, column 3, lines 9-17, column 9, lines 49-62, column 11, lines 31-56).

8. Claims 13, 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergins (U.S. Patent No. 5,826,198) and Acosta (U.S. Patent No. 6,166,729) in view of Toyoshima (U.S. Patent No. 5,236,694).

Regarding claim 13, the combination of Bergins and Acosta teach the communication method defined in claim 12. However, Bergins and Acosta fail to teach further comprising the steps of: holding said predetermined information; deciding whether or not to transmit and receive data based on current predetermined information and old predetermined information held in said holder, or whether or not to interrupt communications if the device is currently in a transmission/reception state. But, Toyoshima teaches holding said predetermined information; deciding whether or not to transmit and receive data based on current predetermined information and old predetermined information held in said holder, or whether or not to interrupt communications if the device is currently in a transmission/reception state (see Toyoshima figure

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1, number 9, figure 2 and column 3, lines 4-54). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to combine Bergins (U.S. Patent No. 5,826,198) and Acosta (U.S. Patent No. 6,166,729) with Toyoshima (U.S. Patent No. 5,236,694) in order to avoid network congestion.

Regarding claim 19, the combination of Bergins, Toyoshima and Acosta teach the communication method defined in claim 12, wherein predetermined information contains information representing an output voltage level of a power source within the device (see Toyoshima figure 2, column 3, lines 4-34).

Regarding claim 20, the combination of Bergins, Toyoshima and Acosta teach the communication method defined in claim 19, wherein said power source within the device comprises a secondary battery (see Toyoshima column 2, lines 66-column 3, lines 3).

Regarding claim 21, the combination of Bergins, Toyoshima and Acosta teach the communication method defined in claim 20, further comprising the step of predicting a transmittable/receivable data amount based on a charging amount or output voltage level of said secondary battery; said predetermined information containing prediction results acquired by said the step of predicting (see Toyoshima figures 1-3 column 2, lines 66-column 4 lines 35).

Regarding claim 22, the combination of Bergins, Toyoshima and Acosta teach the communication method defined in claim 21, further comprising the step of secondary predicting

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the data amount to be transmitted or received in current communications; predetermined information containing the prediction results acquired by step of secondary predicting (see Bergins column 6, lines 63-column 7, lines 23, column 10, lines 60-62).

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alemayehu Behulu whose telephone number is 703-305-4828.

The examiner can normally be reached on 8 AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 703-308-6739. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AB


5-17-04

NGUYENT.VO
PRIMARY EXAMINER